

ABSTRACT OF THE DISCLOSURE

A tailorable elastic skin is provided for covering shape-changing, or “morphable,” structures. The skin comprises a two-dimensional “planar spring” embedded in an elastomeric material. The invention provides a smooth aerodynamic covering capable of global elongation exceeding 20% with a low input force. The design can be tailored for light-weight, lightly loaded applications, or for more heavily loaded aerodynamic or hydrodynamic conditions.